

CS 16. An apparatus according to claim 11, further comprising a hydrotreating zone (15) for hydrotreating a second gasoline cut, said hydrotreating zone having a gasoline cut inlet line which is in fluid communication with said second discharge line (4) for introducing said second gasoline cut from said fractionation column, a first hydrotreated cut outlet line (16), and a hydrogen supply line (17) connected to said gasoline cut inlet line (4) or said hydrotreating zone, and a stripping column (18) having a hydrotreated cut inlet line in fluid communication with said first hydrotreated cut outlet line, an H₂S outlet line (19), and a second hydrotreated cut outlet line (20).

Please ~~add~~ the following new claims:

--18. An apparatus for production of gasoline with reduce sulphur content from a catalytic cracking gasoline, comprising a fractionation column (1) having a gas inlet line (2) for introducing raw catalytically cracked gasoline into said fractionation column, a first discharge line (3) for removing a first gasoline cut from an upper portion of said fractionation column, and a second discharge line (4) for removing a second gasoline cut from a lower portion of said fractionation column;

CB a hydrotreatment zone (5) comprising a catalytic bed, a gasoline cut inlet line (6) for introducing a first gasoline cut, said gasoline cut inlet line being in fluid communication with either said first discharge line (3) of said fractionation column or with a treatment zone (7) containing a palladium catalyst, said treatment zone (7) being positioned between said first discharge line and said hydrotreatment zone, said hydrotreatment zone (5) also comprising a hydrotreated effluent outlet line (8);

a stripping zone (9) comprising a hydrotreated gas inlet in fluid communication with said hydrotreated effluent outlet line (8) of said hydrotreatment zone, an H₂S outlet line (10), and a stripped gasoline outlet line (11); and said apparatus also comprising at least one of the following:

a sweetening zone (12) comprising a gas inlet in fluid communication with said stripped gas outlet line (11) and with an oxidizing agent supply line (14) for introducing oxidizing agent to said sweetening zone and a stripped and sweetened gasoline outlet line connected to said sweetening zone (12); or

a treatment zone (7) having a gas cut inlet connected to said first discharge line (3) of said fractionation column, a treated gasoline cut outlet line, and at least one catalyst bed containing 0.1-1 % of palladium deposited on a support; and

19. An apparatus according to claim 18, wherein said catalytic bed in said hydrotreatment zone (5) contains a catalyst having at least one group VIII metal, at least one group VI metal, or a combination thereof.

20. An apparatus according to claim 11, wherein said selective diene hydrogenation zone contains a catalyst comprising at least one group VIII metal and a support.

21. An apparatus according to claim 20, wherein said catalyst of said selective diene hydrogenation zone comprises 0.1-1 % of palladium deposited on a support.

22. An apparatus according to claim 21, wherein said catalyst of said selected diene hydrogenation zone further contains 1-20 % by weight nickel or contains gold in an amount whereby the Au/Pd weight ratio is 0.1-1.

23. An apparatus according to claim 11, wherein said hydrogenation zone contains a first catalyst bed and a second catalyst bed, said first catalyst zone is in fluid communication with the gasoline cut inlet line and said second catalyst zone is in fluid communication with said first catalyst zone.

24. An apparatus according to claim 23, wherein said first catalyst zone is at most 75 volume % of the total volume of said first catalyst zone of said second catalyst zone.--